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This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s desosaminyl and (azithromycin or azaerythromycin)

77 DESOSAMINYL

3147 AZITHROMYCIN

11 AZAERYTHROMYCIN

L14 DESOSAMINYL AND (AZITHROMYCIN OR AZAERYTHROMYCIN)

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L1 ANSWER 1 OF 4 CA COPYRIGHT 2006 ACS on STN

ΑN 142:6766 CA

Preparation of alkyl erythromycin macrolide and azalide derivatives as TI antibacterial agents via regioselective O-alkylation

IN Kidemet, Davor; Lazarevski, Gorjana; Derek, Marko; Leljak, Marija

Pliva-Istrazivacki Institut D.O.O., Croatia PΑ

SO PCT Int. Appl., 35 pp. CODEN: PIXXD2

DT Patent

English

FAN.	CNT	3	•															- 5	
	PATENT NO.							DATE		APPLICATION NO.						DATE			
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              THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT
     ANSWER 2 OF 4 CA COPYRIGHT 2006 ACS on STN
L1
AN
     139:53250 CA
     One-step enhanced process for the preparation of 7,16-dioxa-2-aza-10-0-
ΤI
     cladinosyl-12-0-desosaminyl-4,5-dihydroxy-6-ethyl-3,5,9,11,13,15-
     hexamethylbicyclo[11.2.1]hexadec-1-en-8-one from erythromycin A
IN
     Lara Ochoa, Jose Manuel Francisco; De La Torre Garcia, Juan Antonio;
     Andrade, Fidencio Franco
     Laboratorios Silanes, S.A. de C.V., Mex.
PA
SO
     Mex. Pat. Appl., 11 pp.
     CODEN: MXXXA3
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     CASREACT 139:53250
     ANSWER 3 OF 4 CA COPYRIGHT 2006 ACS on STN
L1
AN
     136:151389 CA
ΤI
     Single-step process for preparing 7,16-deoxa-2-aza-10-0-cladinosyl-12-0-
     desosaminyl-4,5-dihydroxy-6-ethyl-3,5,9,11,13,15-
     hexamethylbicyclo[11.2.1]hexadeca-1(2)-en-8-one and obtaining a new form
     of 9-deoxo-9a-methyl-9a-aza-9a-homoerythromycin A
IN
     De La Torre Garcia, Juan Antonio; Franco Andrade, Fidencio; Lara Ochoa,
     Jose Manuel Francisco
     Laboratorio Silanes, S.A. De C.V., Mex.; Instituto De Investigacion En
PA
     Quimica Aplicada S.C
so
     PCT Int. Appl., 28 pp.
     CODEN: PIXXD2
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FAN.CNT 1
     PATENT NO.
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     WO 2002010144
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     CASREACT 136:151389
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## RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L1 ANSWER 4 OF 4 CA COPYRIGHT 2006 ACS on STN
- AN 129:193713 CA
- TI Pain reducing parenteral liposome formulation containing macrolide drugs and negatively charged lipids
- IN Liu, Rong; Peck, Kendall D.; Flood, Kolette M.; Zheng, Jack
- PA Abbott Laboratories, USA
- SO PCT Int. Appl., 26 pp.

CODEN: PIXXD2

- DT Patent
- LA English
- FAN CNT 1

FAN.CNT 1																				
		PATENT NO.										DATE								
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:	ΑU					A1	A1 199808				AU 1998-60414						19980126			
	EΡ	975330			A1 20000202				EP 1998-903718						19980126					
	R: DE, FR, GB, I										•									
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									ZA 1998-833											
	MX	MX 9907204				Α	A 20000228				MX 1999-7204						19990804			
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ALL CITATIONS AVAILABLE IN THE RE FORMAT

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- L1 ANSWER 1 OF 4 CA COPYRIGHT 2006 ACS on STN
- AN 142:6766 CA
- AB The present disclosure relates to new 11-0-alkyl macrolides and azalide erythromycins I, wherein R is hydroxy, -NH, or together with R1 forms a keto group or =NR6; R1 is hydrogen, -NH, or together with R forms a keto group or =NR6; R6 is H or alkyl; R3 is desosaminyl sugar residue or hydroxy; R4 is hydrogen, alkyl, alkenyl optionally substituted by 9 to 10 membered fused bicyclic heteroaryl; R5 is hydrogen or fluorine; and pharmaceutically acceptable salts and solvates thereof, and to pharmaceutical compns. thereof. The disclosure also relates to a process for the preparation of 11-0-alkyl macrolides and azalides by regioselective 11-0-alkylation of macrolides and azalides having a vicinal diol system, using diazo-alkanes in the presence of transition-metal halides or boric acid as catalysts. In another aspect, the disclosure relates to uses of the 11-O-alkyl macrolides and azalides as antibacterial agents or intermediates for the synthesis of other antibacterial agents. Thus, 11-0-methyl-9-deoxo-9a-aza-9a-homoerythromycin was prepared as as antibacterial agents via regioselective O-methylation. The compds. of the invention may be active against strains of Staphylococcus aureus, Streptococcus pneumoniae, Moraxella catarrhalis, Streptococcus pyogenes, or Haemophilus influenzae. The compds. of the present invention exhibit better activity against inducible (Streptococcus pyogenes B0543 and B0545) resistant strains than the parent compds. Title compds. can be

administered at a dosage of from about 1 mg/kg to about 1000 mg/kg of body weight per day. The preferred dosage range is from about 5 mg/kg to about 200 mg/kg of body weight per day.

- L1 ANSWER 2 OF 4 CA COPYRIGHT 2006 ACS on STN
- AN 139:53250 CA
- AB An improved process was disclosed for the preparation of the title compound I via

cyclization of erythromycin A with good yield and under mild conditions. Erythromycin A was transformed in one-step into an azithromycin intermediate 6,9-iminoether I, through the in situ formation of mesitylenesulfonyl oxime from the erythromycin, which in the presence of a base in aqueous acetone underwent a Beckmann rearrangement.

- L1 ANSWER 3 OF 4 CA COPYRIGHT 2006 ACS on STN
- AN 136:151389 CA
- AB An improved method for preparing 7,16-deoxa-2-aza-10-O-cladinosyl-12-O-desosaminyl-4,5-dihydroxy-6-ethyl-3,5,9,11,13,15-hexamethylbicyclo[11.2.1]hexadeca-1(2)-en-8-one comprises treating erythromycin A with O-(mesitylenesulfonyl)hydroxylamine in acetone (75% yield). Catalytic reduction of the product afforded 9-deoxo-9a-methyl-9a-aza-9a-homoerythromycin A (azithromycin), which was characterized spectrally, by differential thermal anal. and X-ray diffraction.
- L1 ANSWER 4 OF 4 CA COPYRIGHT 2006 ACS on STN
- AN 129:193713 CA
- Disclosed is an invention directed towards pain-reducing parenteral AB formulations comprising a macrolide drug entrapped in a liposome vesicle. The macrolide drug is selected from the group consisting of derivs. of erythromycins A, B, C and D; clarithromycin; azithromycin; dirithromycin; josamycin; midecamycin; kitasamycin; roxithromycin; rokitamycin; oleandomycin; miocamycin; flurithromycin; rosaramicin; 8,9-anhydro-4''-deoxy-3'-N-desmethyl-3'-N-ethylerythromycin B 6,9-hemiacetal; 8,9-anhydro-4''-deoxy-3'-N-desmethyl-3'-Nethylerythromycin A 6,9-hemiacetal; and 11-amino-11-de oxy-3-oxo-5-0desosaminyl-6-0-[1'-3'-quinolyl-2'-propenyl]-erythronolide A 11,12-cyclic carbamate. The formulations of the invention are effective in substantially reducing the pain at the injection site typically associated with the injection of macrolide antibiotics. A liposomal formulation was prepared containing ABT-229 125, dimyristoylphosphatidylcholine 850, phosphatidylglycerol 430, BHT 2.5, lactose 5000 mg, and water q.s. 50 mL.